

## Smallpox vaccine prevents smallpox, but requires very careful use.

### What side effects should I expect?

Most people have reactions, usually mild, such as itching, swollen lymph nodes, sore arm, fever, headache, body ache, mild rash, or fatigue. These symptoms may peak 3 to 12 days after vaccination.

In the past, about 1,000 out of every 1,000,000 vaccinated people experienced reactions that were serious, but not life-threatening. Most involved spreading vaccinia virus elsewhere on the body.

In the past, between 14 and 52 people out of 1,000,000 vaccinated for the first time experienced potentially life-threatening reactions, including skin reactions and encephalitis (inflammation of brain). From past experience, 1 or 2 people in 1,000,000 who receive smallpox vaccine may die as a result.

After the first 500,000 military smallpox vaccinations thru Dec 2003, few serious reactions occurred. Some first-time vaccinees had chest pain due to myo-pericarditis (inflammation in or around the heart). These cases ranged from mild to serious. One case of lupus-like illness may have been triggered by vaccination.

A few heart attacks, some fatal, have been reported. At this time, they are not believed to be caused by vaccine. DoD medically exempts people with heart conditions. Further investigation is underway.

We try to reduce the risk of side effects by exempting people who should not receive this vaccine.



**Don't scratch that itch.**

*Vaccine virus can accidentally spread to your eye or elsewhere. This woman recovered with a scarred eyelid.*

### What can I do to prevent spreading the vaccine virus (vaccinia) to my household pets?

There is no evidence that vaccinia virus can infect cats, dogs, or other household pets, nor that pets can spread the virus to other people in the household. Take the usual protective steps (e.g., sleeves, bandages, hand washing) to keep vaccinia virus from reaching your pet.

### How should I care for the vaccination site?

#### Three Key Points:

1. **Don't touch your vaccination site.**
2. **If you touch it by accident, wash your hands right away.**
3. **Don't let others touch your vaccination site or materials that touched it.**

Vaccine virus (vaccinia) is present at the vaccination site for about 14 to 28 days, until the scab falls off. This means other people can get infected if they come in contact with vaccinia virus from your arm. Minimize close contact with infants until the scab falls off. Or have someone else handle the infant.

Most vaccination sites can be left unbandaged, when not in contact with other people. Use an absorbent bandage as a touch-resistant barrier. **When near others, wear sleeves to cover the site and prevent scratching.** Dispose of bandages in sealed or double plastic bags. You may carefully add a little bleach to the bag, to kill the virus.

Keep the site dry. Air will speed healing. Do not use creams or ointments; they will delay healing and can spread the virus. Wear long-sleeve clothing to protect the site. Launder clothing and linens that touch the site in hot water with soap or bleach.

Normal bathing can continue, but don't touch or scrub the vaccination site. Dry the site last, with something disposable, so a towel does not rub or spread virus elsewhere. Don't allow others to use that towel until laundered. Don't use public towels, unless laundry workers know you were vaccinated. Use a waterproof bandage if you exercise enough to cause sweat to drip. Avoid swimming and hot tubs.

**Don't let your guard down at home!** Take good care of your vaccination site. Keep this sheet. Read it again later. Be sure to ask questions.

## WHAT YOU NEED TO KNOW ABOUT SMALLPOX VACCINE



For more information

**[www.smallpox.mil](http://www.smallpox.mil)**

e-mail us at:

**[vaccines@amedd.army.mil](mailto:vaccines@amedd.army.mil)**

**877-GET-VACC**

**DSN 761-4245**

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#### Smallpox Vaccination Program

- For information about vaccine or policy, Military Vaccine (MILVAX) Agency: **[www.smallpox.mil](http://www.smallpox.mil)**  
E-Mail: **[vaccines@amedd.army.mil](mailto:vaccines@amedd.army.mil)** Toll-Free: **877.GET.VACC**
- For medical advice about **your** smallpox vaccination, DoD Vaccine Clinical Call Center: Toll-Free: **866.210.6469**
- DoD Vaccine Healthcare Centers: **[www.vhcinfo.org](http://www.vhcinfo.org)**  
E-Mail: **[askvhc@amedd.army.mil](mailto:askvhc@amedd.army.mil)** Phone: **202.782.0411**
- CDC National Immunization Hotline: **800.232.2522**

**Information for Civilian Healthcare Providers:** If a Reservist or Active Duty Military Member presents to you for a condition that may be an adverse event caused by a military vaccination, please provide the appropriate care and contact the following for authorization and payment:

**The Military Treatment Facility (MTF)** where the member is enrolled, OR contact

**The Military Medical Support Office (MMSO) 888-647-6676** if the member is not enrolled to an MTF.

## Smallpox would disrupt military missions.

### Smallpox is contagious and deadly.

#### What is smallpox?

Smallpox is a very serious disease; it is contagious and sometimes fatal.

Smallpox is an infection caused by a germ called variola virus. About 3 out of 10 people infected with smallpox will die. Survivors are often scarred and, in rare cases, may be blinded.

Smallpox spreads slowly, usually by face-to-face contact for an hour or more with a contagious person. People with smallpox become contagious just before a rash begins and just after their temperature goes over 101°F (38.3°C). They stay contagious until all scabs from their rash fall off.

The symptoms of smallpox begin with high fever, head and body aches, and sometimes vomiting. A rash follows that spreads and progresses to raised bumps that crust, scab, and fall off after about three weeks, leaving pitted scars.

Smallpox can be spread by contact with inanimate objects (such as clothing, towels, linens), but this would be uncommon.

Smallpox can be prevented through the use of smallpox vaccine.

### Preserving the health and safety of our people are our top concerns.

#### What is the smallpox vaccine?

Smallpox vaccine contains live vaccinia virus (not smallpox virus) to protect against smallpox. **This same vaccine was given to millions of Americans, including Service Members during World War I, World War II, and until the 1980s.**

FDA recently licensed a supply of smallpox vaccine made by Wyeth Laboratories called *Dryvax*®. Vaccine used for Service Members passes all tests required by the FDA.

The World Health Organization (WHO) used smallpox vaccine to eradicate natural smallpox from the planet. After a single smallpox vaccination, about 95% of people develop protection within 10 days.

Many people have never been vaccinated against smallpox. Other people probably have little immunity left from vaccinations given years ago.

#### Who should not get smallpox vaccine?

Except in an outbreak situation, some people should not get smallpox vaccine, including:

- **People whose immune system is not working fully** (due to disease, medication, or radiation), such as HIV/AIDS, cancer, transplant, immune deficiency.
- People diagnosed with eczema or atopic dermatitis, now or earlier in life.
- People with current skin conditions, such as burns, impetigo, contact dermatitis, chickenpox, shingles, psoriasis, or uncontrolled acne, until the condition clears up.
- **Pregnant women.**
- People with a household contact who meets any of the conditions above.
- People with serious heart or vessel conditions (such as angina, heart attack, artery disease, congestive heart failure, stroke, other cardiac problem).
- People with 3 cardiac risk factors (smoking, high blood pressure or cholesterol, diabetes, family history)
- People taking steroid eye drops or ointment.
- Breastfeeding mothers.
- Anyone who had problems after previous doses or is allergic to the vaccine or any component.
- **Women should avoid getting pregnant for 4 weeks after smallpox vaccination.**
- People directly exposed to smallpox virus should get vaccinated regardless of health status (unless extremely immune suppressed).

### Smallpox protection helps our Global War on Terrorism. New threats require new measures for force protection.

#### How do you care for the smallpox vaccination site?

- ✓ Don't touch any smallpox vaccination site. Wash your hands frequently. Don't let other people touch your site or materials that touched it.
- ✓ Until your scab falls off, avoid close contact with people who cannot receive the vaccine. Do not share a bed, bunk, or cot with them. Do not share clothes, towels, linen, or toiletries.
- ✓ Wear sleeves to cover the site. **Wear sleeves at night. Use bandages.** Dispose of bandages in sealed or double plastic bags. You may carefully add a little bleach to the bag, if desired, to kill the virus.
- ✓ Keep site dry, except normal bathing. Avoid rubbing. Avoid swimming.
- ✓ Launder clothing, towels, & sheets in hot water with detergent or bleach. When the scab falls off, flush it down the toilet. Wash your hands.
- ✓ Follow these instructions carefully, or you could harm yourself or others.

#### Reporting adverse events:

- ✓ Adverse events after vaccination should be reported to the Vaccine Adverse Event Reporting System (VAERS). Submit VAERS reports on-line at [www.vaers.org](http://www.vaers.org) or call 800.822.7967.

### Smallpox Vaccination Site: expected response after vaccination.

**Note:** If your vaccination site does **NOT** look like one of the pictures below on Days 6 to 8 after vaccination, see your healthcare provider.



See also:

[www.bt.cdc.gov/training/smallpoxvaccine/reactions/normal.html#](http://www.bt.cdc.gov/training/smallpoxvaccine/reactions/normal.html#)

#### What should I expect at the vaccination site?

If vaccination is successful, a red and itchy bump forms at the vaccination site in 2 to 4 days. Over the next few days, the bump becomes a blister and fills with pus. During the second week, the blister dries up and a scab forms. The scab falls off after 2 to 4 weeks, leaving a scar. People vaccinated for the first time may have a larger reaction than those being revaccinated.

Anyone who does not get the expected reaction needs to be revaccinated. If you have a question or concern about the smallpox vaccination site, contact your primary-care manager or healthcare provider.

Virus is present on the skin at the vaccination site until the scab falls off. Be careful not to touch it, so you don't spread virus elsewhere, especially to the eyes, nose, mouth or genitalia.

Wash your hands frequently. Alcohol-based cleansers or soap and water are both effective.

If you develop chest pain, become short of breath, or have other symptoms within 2 weeks after vaccination, seek medical care.

If you need medical care in the month after your vaccination, tell your provider you just got a smallpox vaccination. Tell any civilian employers, too.